State of Ohio Environmental Protection Agency

Southeast District Office

2195 Front Street
Logan, Ohio 43138

TELE: (740) 385-8501 FAX: (740) 385-6490
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

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MONROE COUNTY
ORMET CORPORATION
DERR CORRESPONDENCE

Bernard J. Schorle, RPM
USEPA Region V
Mail Location: SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Re: Alternative to discontinuing operations of the ground water plume interceptor wells at the Ormet Corporation Superfund Site

Dear Mr. Schorle:

Ohio EPA staff have reviewed the Ormet Primary Aluminum Corporation's (Ormet) request to terminate the use of the existing interceptor wells associated with the plant's ground water remediation system. In general, Ohio EPA is opposed to this request but submits for your consideration a potential alternative that may allow Ormet to reduce their remediation expenses while maintaining compliance with the judicial order for the Site.

Ohio EPA staff considered the following items while researching alternatives:

- The General Allegations section of the order indicates in Paragraph 11, "On September 12, 1994, U.S. EPA selected a response action for the Site that is embodied in a Record of Decision ("ROD"). The selected response action includes: A) extraction and treatment of groundwater; …"
- The ROD's description of the Selected Remedy section for ground water indicates: "Pumping shall continue at the Ormet Ranney well and existing interceptor wells to maintain capture zone of contaminated ground water. Interceptor well water shall be treated by ferrous salt precipitation and clarification, or other means necessary to achieve standards set by the Ohio Environmental Protection Agency (OEPA) Program implementing the National Pollutant Discharge Elimination System (NPDES). Treated water shall be discharged to the Ohio River.
- Page 10 of the ROD indicates, "the remedy also focuses on restoration of the ground water to drinking water quality."

- Page 23 of the ROD indicates, "Ground water shall be extracted using the existing system of two barrier wells for contaminant capture, supplemented by the high-capacity Ormet Ranney well to ensure plume containment. The water from the extraction wells shall be treated by a system that will allow the quality of the effluent to meet standards set by the State's NPDES program and incorporated into a permit issued to Ormet by the State… The system shall maintain a capture zone so as to prevent Site contaminants from migrating in the subsurface to the Ohio River…"
- Page 28 of the ROD indicates, "For ground water, the point of compliance with the cleanup levels shall be everywhere within the plume, including the area under the FSPSA, because the remediation goal for ground water is restoration to drinking water quality."
- Page 29 of the ROD indicates, "Finally, the statute [CERCLA] establishes a preference for remedies which employ treatment that significantly reduces the toxicity, mobility or volume of contaminants."
- Page 30 of the ROD indicates, "Extracting and treating the ground water will reduce the ingestion-related risk to future workers and will restore the aquifer to its most beneficial use."
- Page 32 of the ROD indicates, "The selected remedy shall meet MCLs and non-zero MCLGs at the Site."
- Page 35 of the ROD indicates, "Preference for Treatment as a Principal Element… The remedy does satisfy the statutory preference for treatment of the principal threat; the cyanide in the FSPSA and the ground water…"

These quotations from the judicial order and the Record of Decision demonstrate clearly several concepts:

1. Ground water must be extracted and treated.
2. The ground water plume must be controlled so as to not be released into the Ohio River untreated.
3. The goal of this remedy is to restore ground water to beneficial use by cleaning up the plume to MCLs.
4. CERCLA has a <u>preference for treatment</u> over dilution or media transfer.

When considering cyanide, several technical points are worth repeating. The analytical method for total cyanide determines the sum of concentrations of iron-cyanide complexes and weak acid dissociable (WAD) cyanide, sometimes referred to as cyanide amenable to chlorination. The cleanup standard for Ormet's groundwater plume is based on Safe Drinking Water Act established Maximum Contaminant Levels (MCLs). The MCL for cyanide is based on WAD cyanide.

Ohio EPA is sensitive to Ormet's financial position and desire to reduce their long-term financial assurance obligations. The research conducted by Ohio EPA staff suggests that copper impregnated activated carbon may be a more cost effective technology for Ormet. Implementing this technology, or a similar one, may also allow for additional mass removal closer to the source while maintaining compliance with the requirements contained in Ormet's NPDES permit.

In conclusion, Ohio EPA recommends that U.S. EPA deny Ormet's request to discontinue the use of the existing groundwater treatment system unless an equivalent or improved treatment technology is installed. Ohio EPA believes this new form of treatment should be explored as it may allow the company to decrease the cleanup time necessary to restore the aquifer to beneficial use, comply with their judicial consent order, CERCLA, and the spirit of our cleanup process. If you have any questions, please contact me.

Sincerely,

Michael D. Sherron
Site Coordinator
Division of Emergency & Remedial Response
michael.sherron@epa.state.oh.us
(740) 380-5251

MDS/jg

cc: Scott Foster, DSW
Jane Jacobs, DDAGW
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